

Summary
of the
South Dakota Methamphetamine
Parolee Treatment Program Data

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Key Summation Points

- 67.8% of clients completed or remain in the program and progressing in the treatment program over all three years of program operation.
- Nineteen of fifty nine clients either relapsed or violated parole over all three years of the program
- In the first program year (2005) 55% of clients completed the program.
- In the second program year (2006), 64% of clients completed or continue in the program.
- In the third program year (2007), 93% of clients continue in the program.
- 73% of program participants reported improvements in mental health between Intake and completion of Phase II and improvements continue or are sustained through the remainder of the program.
- Over 70% of program participants improved or maintained high family functioning throughout the program phases.
- Program participants report significant declines in temptation to use and increases in confidence in their ability to not use methamphetamine throughout the program phases.

Data was available for analysis on 59 program participants from all three years of the program. Slightly more males than females have participated in the program to date. The average age of female participants was 27.1 years of age which is approximately six years younger than males the average male age of 27 years.

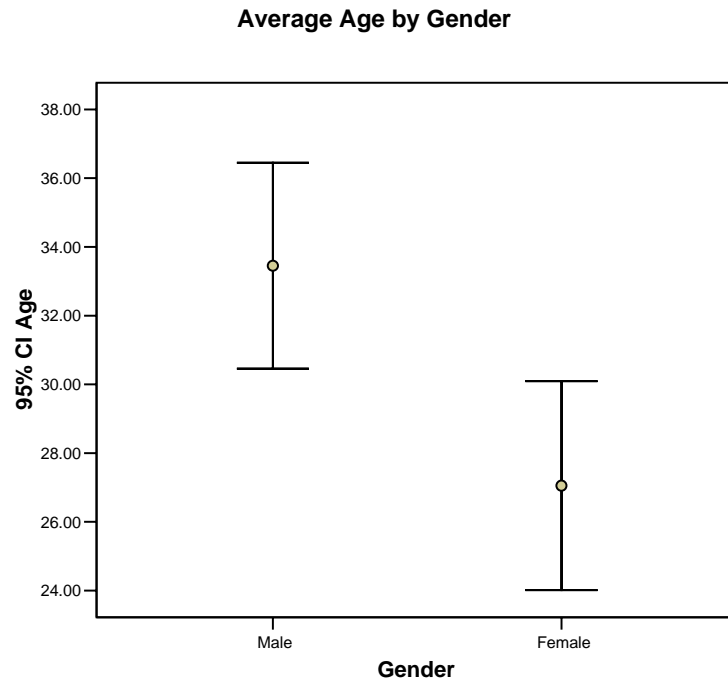
**Number of Program Participants
by Gender**

		Frequency	Percent
Valid	Male	30	50.8
	Female	29	49.2
	Total	59	100.0

**Average Age of Program Participant
By Gender**

Gender	Mean	N	Std. Deviation	Minimum	Maximum
Male	33.4520	30	8.02413	20.15	48.44
Female	27.0526	29	7.83508	18.39	43.60
Total	30.3626	59	8.49953	18.39	48.44

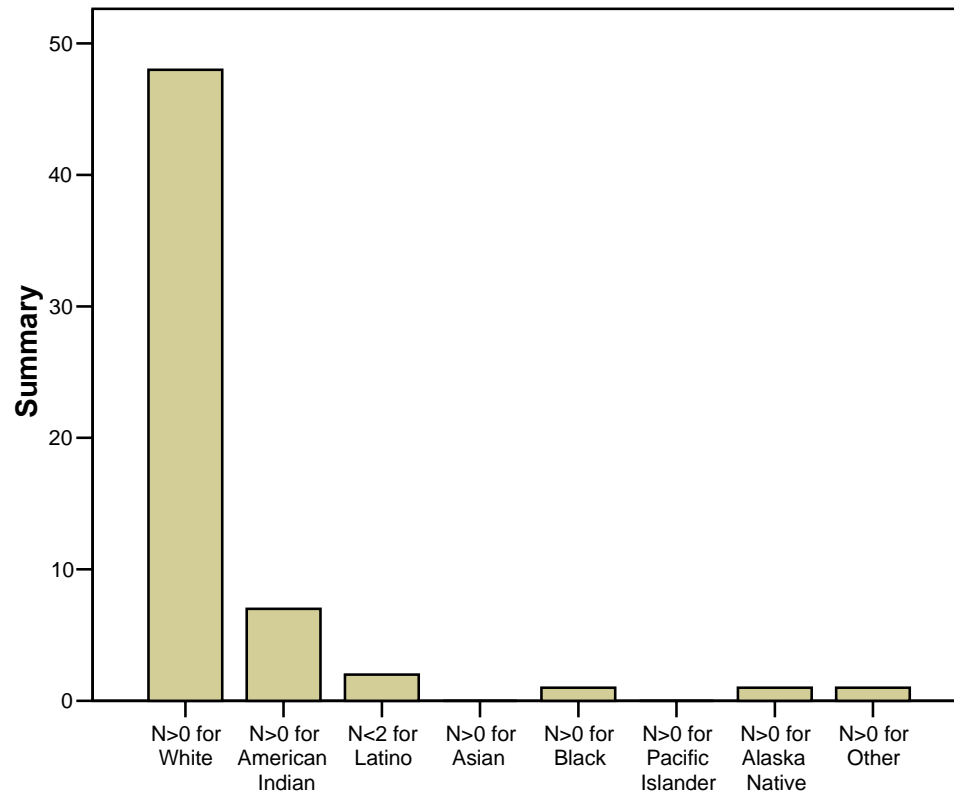
The youngest participant was 18 years of age and the oldest participant was 48 years of age. Overall the majority of males were between the ages of 29 and 37 and the majority of females were between the ages of 24 and 30.



Race/Ethnicity

The majority of program participants report their racial/ethnic background as White followed by Native Americans, and Latinos.

Number of Participants by Ethnicity



Age of First Substance Use

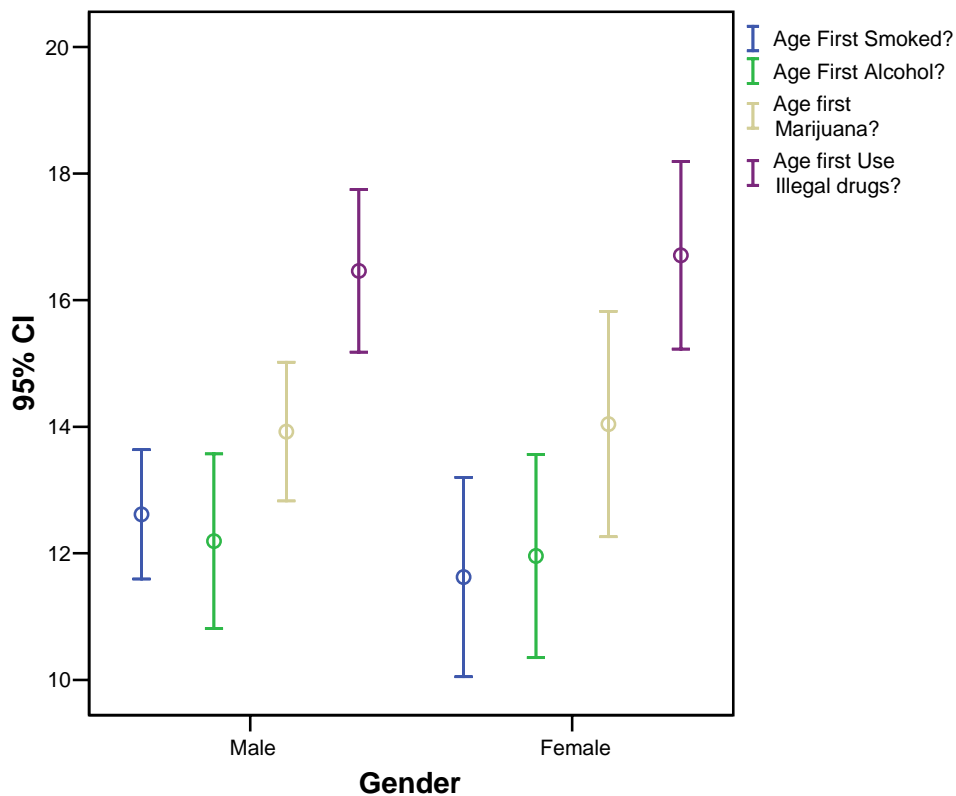
Program participants were asked to report the earliest age they remembered using tobacco, alcohol, and Marijuana, and Other Illegal Drugs. The average age of first use for tobacco and alcohol was approximately 12.1 years of age. Age of first use of Marijuana was two years later at 14.1 years of age and age of first use of other illegal drugs was 16.8 years of age.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age First Smoked?	50	5	20	12.14	3.169
Age First Alcohol?	52	1	18	12.12	3.513
Age first Marijuana?	52	5	29	14.08	3.480
Age first Use Other Illegal drugs?	52	9	28	16.79	3.610

Patterns of first use were found to be similar between males and females.

Age of First Substance Use by Gender



Substance Use History and Follow-up Reports

Program participants are queried regarding the history of their substance use as part of the program assessment. Substance use questions follow national standards and inquire about substance use in the past 30 days. This question format may be slightly misleading in regards to the intake assessment period since a portion of the participants were in incarcerated settings prior to entering the treatment program. With this caveat in mind, individuals that report using methamphetamine in the past 30 days at intake and the number of days of methamphetamine use are reported in the table below.

**Days of Meth Use in the past 30 days reported
by Program Participants at Intake**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	37	63.8	72.5	72.5
	1	4	6.9	7.8	80.4
	2	2	3.4	3.9	84.3
	3	1	1.7	2.0	86.3
	4	1	1.7	2.0	88.2
	5	1	1.7	2.0	90.2
	10	1	1.7	2.0	92.2
	15	1	1.7	2.0	94.1
	16	1	1.7	2.0	96.1
	17	1	1.7	2.0	98.0
	21	1	1.7	2.0	100.0
	Total	51	87.9	100.0	

The following table documents follow-up reports of methamphetamine use reported by the program participants at Phase II, Phase III, and Phase IV of the program. Two program participants report using methamphetamine on 2 occasions after entering the program. This is based on data available. It should be noted that some individuals that “violated” or relapsed did not provide follow-up testing data for analysis. This information is summarized in the next section.

Report of Methamphetamine Use After Starting the Program

		Number of Participants	Percent	Valid Percent	Cumulative Percent
Valid	No Use	49	84.5	96.1	96.1
	Used	2	3.4	3.9	100.0
	Total	51	87.9	100.0	

- Reported by program participants on the GPRA form.

Similar findings on alcohol use are also reported by program participants. Again, some individuals were in incarcerated settings in the 30 days prior to entering the treatment program which would have affected the number reporting alcohol use during the past 30 days at intake. Similar to the findings regarding methamphetamine use presented above, two individuals report using alcohol at follow-up periods. Keep in mind this is only inclusive of individuals that data was available for at follow-up periods and violations are reported in the next section.

**Alcohol Use In Past 30 Days Reported by Program Participants
at Intake by Alcohol Use In Past 30 Days at Phase 2 to 4**

Intake		Alcohol Use During Phase 2 to 4		Total
		No	Yes	
Alcohol Use	No	28	1	29
	Yes	20	1	21
Total		48	2	50

Relapse and Parole Program Status

Based on data submitted for analysis as of January 24, 2006, nineteen of fifty nine clients either relapsed or violated parole. Stated positively, 67.8% of clients completed or remain in the program and progressing in the treatment program according to data available for analysis. It should be noted that the percent of program participants completing or continuing in the program has increased in program years 2006 and 2007 compared to the initial program year.

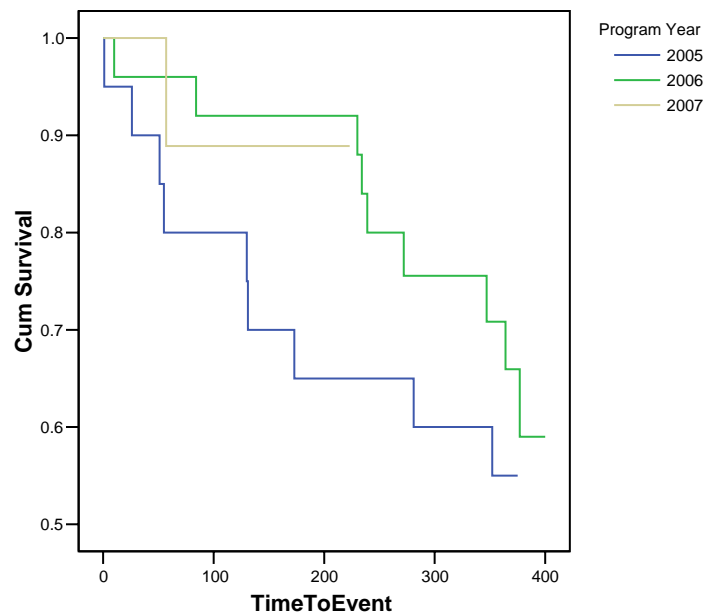
Violation Status and Program Year

Violation Status		year			Total
		2005	2006	2007	
Completed/ Continues	Count	11	16	13	40
	% within year	55.0%	64.0%	92.9%	67.8%
Violated	Count	9*	9	1	19
	% within year	45.0%	36.0%	7.1%	32.2%
Total	Count	20	25	14	59
	% within year	100.0%	100.0%	100.0%	100.0%

- Note: One client should not have been in the program during the first year of the program and was violated and returned back to prison.

The following Survival Function graph depicts improvement in the programs ability to retain clients in the second and third year of program operation as compared to the initial year of the program.

Survival Function

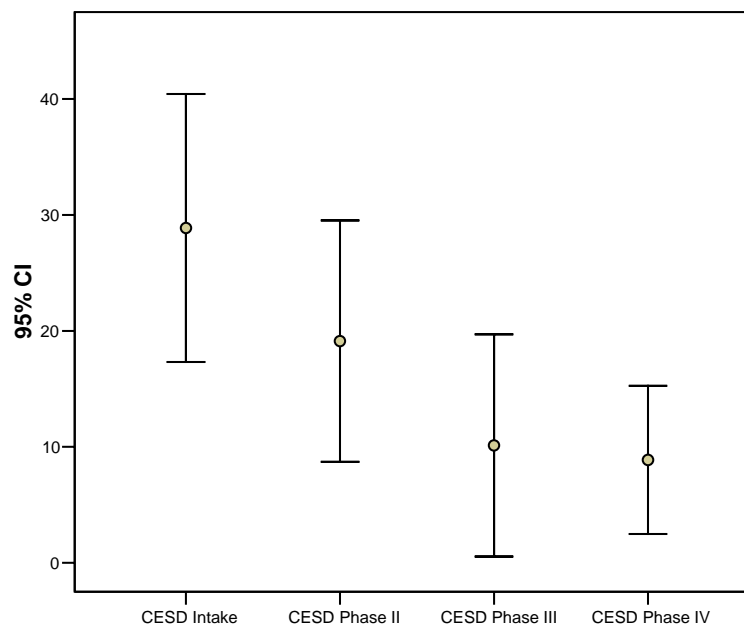


Depressive Symptoms

Depression is a significant factor related to substance use and abuse. Depression and depressive symptoms are measure using a **Center for Epidemiological Studies Depression Scale (CES-D)** . The CES-D scale was originally developed as a general screening measure for depression (Randloff, 1977). It is designed to measure current level of depressive symptoms, and especially depressive affect. Each item is rated on 4-point scales indicating the degree of their occurrence during the last week. Individuals with scores ≥ 16 are considered at-risk.

Based on the initial intake data collected, the average depressive symptoms reported by participants indicate that the majority of individuals are at-risk. The data indicate a downward trend corresponding to a reduction of depressive symptoms. The graph below documents a decline of depressive symptoms reported by program participants (average CESD scores) from intake through the each phase of the program.

Trend in CESD Scale Scores



Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CESD Intake	40	4	51	20.90	10.758
CESD Phase II	34	1	40	12.62	8.917
CESD Phase III	25	0	34	7.24	7.897
CESD Phase IV	14	0	19	7.43	6.333

Of all clients for which CESD scores were available for analysis, 73% improved their mental health as reported by the program participants on the CESD between Intake and completion of Phase II. Program participants continued to improve during Phase III of the program.

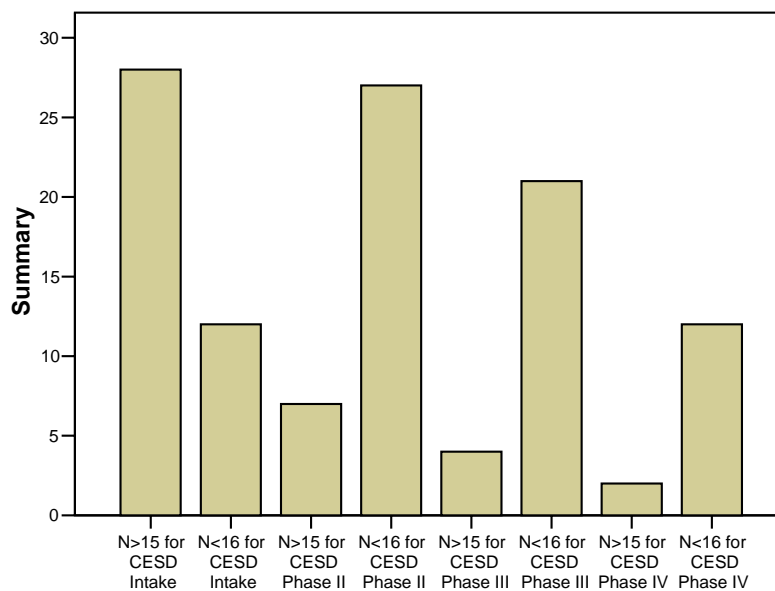
CESD Score Improvement by Phase

	Intake to Phase II		Phase II to Phase III		Phase III to Phase IV	
	number	%	number	%	number	%
Improved	26	73.1	16	84.2	5	41.7
Maintained	-	-	1	5.3	1	8.3
Declined	7	26.9	2	10.5	6	50.0
Total*	33		19		12	

* Represents program participants with CESD scores available for analysis.

It would appear from an initial look at the data that clients began to decline during Phase IV based solely on comparison of their CESD scores from the end of one phase to the beginning of the next phase. Thus, a single point increase would indicate a decline in the overall score which is normal in the flow of daily life. Another way to examine this issue is to consider the number of individuals that score below the “At-Risk” cut point for depressive symptoms as captured by the CESD. The following graph highlights the number of clients that score above and below the ‘At-Risk’ cut point by program phase. It should be noted that a dramatic decline occurred in individuals reporting depressive symptoms from Intake to Phase II. The trend is maintained during Phase III and Phase IV indicating a continuation in improvement or maintaining mental health symptoms.

Number of Participants By CESD Risk for Depression by Phase



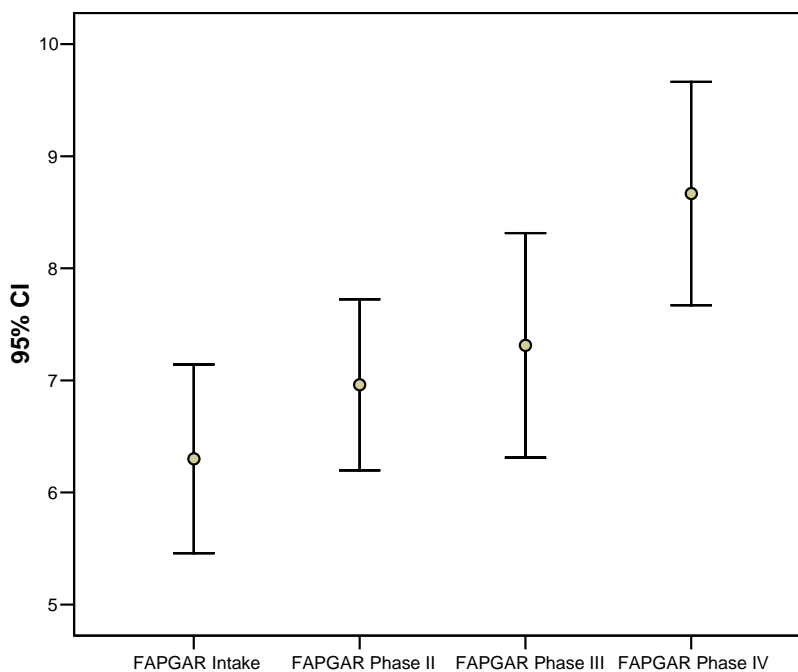
*A score of 16 or greater indicates a risk for depression

Family Functioning

The Family Adaptation, Partnership, Growth, Affection, and Resolve (FAPGAR) was used to measure family functioning. The FAPGAR (Smilkstein, 1978) is a multi-dimensional measure of global family functioning. The instrument features five closed-ended questions designed to permit quantitative measurement of the participants' satisfaction with each of the five basic components (Adaptation, Partnership, Growth, Affection, Resolve) of family functioning. The FAPGAR offers respondents three possible responses (Almost always, Some of the time, Hardly Ever) to each of the three questions. Scores range from 0 to 10 with higher scores indicating better family functioning.

Average family functioning for all clients increased over the course of the program from an Intake average score of 6.3 to a Phase IV score of 8.7 on the FAPGAR assessment. Approximately one-half of the clients indicate moderate to good family functioning while the remaining clients indicate moderate to poor family functioning.

Trend in Family Functioning (FAPGAR) Scale Scores



Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FAPGAR Intake	50	.00	10.00	6.3000	2.96407
FAPGAR Phase II	51	1.00	10.00	6.9608	2.71264
FAPGAR Phase III	32	1.00	10.00	7.3125	2.77590
FAPGAR Phase IV	15	4.00	10.00	8.6667	1.79947

The following table highlights the number of clients that improved their Family Functioning score from phase to phase. Over 75% of program participants improved or maintained their scores during the initial program phase (Intake to Phase II). The trend is maintained during Phase III and Phase IV.

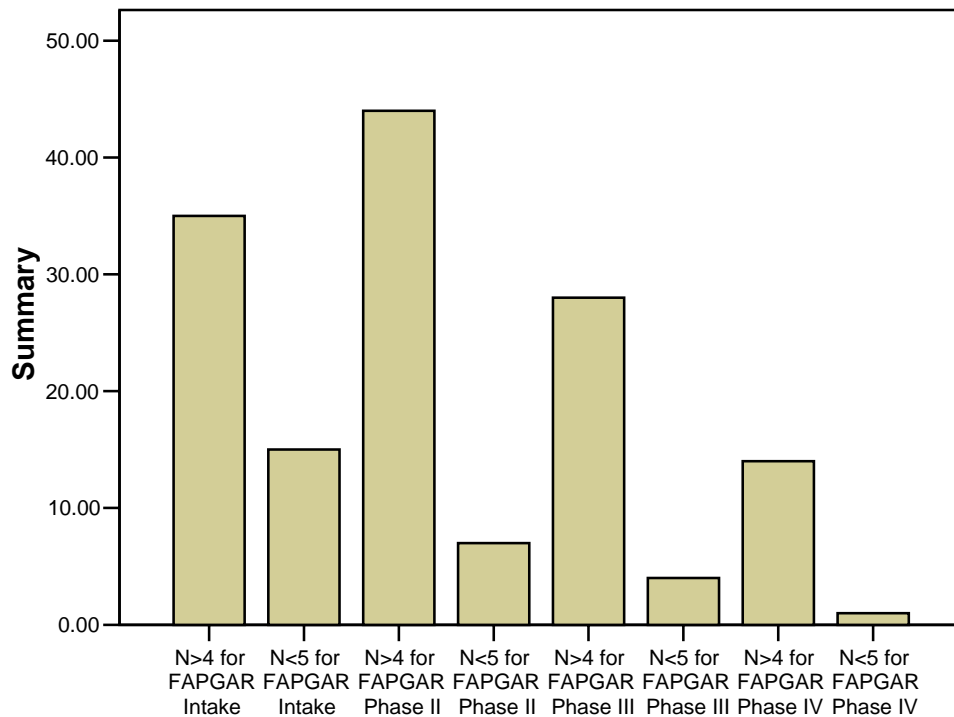
FAPGAR Score Improvement by Phase

	Intake to Phase II		Phase II to Phase III		Phase III to Phase IV	
	number	%	number	%	number	%
Improved	23	48.9	14	48.3	7	50.0
Maintained	13	27.7	7	24.1	4	28.6
Declined	11	23.4	8	27.9	3	21.4
Total*	47		29		14	

* Represents program participants with FAPGA scores available for analysis.

Another important point to consider in reviewing the Family Functioning scores from the FAPGAR is the number of clients that were assessed as 'At-Risk' for issues related to family functioning. Scores of 4 or less indicate a concern related to family functioning. The following graph classifies the number of clients by FAPGAR risk score by phase.

Number of Participants By Family Functioning Risk Cut Scores by Phase



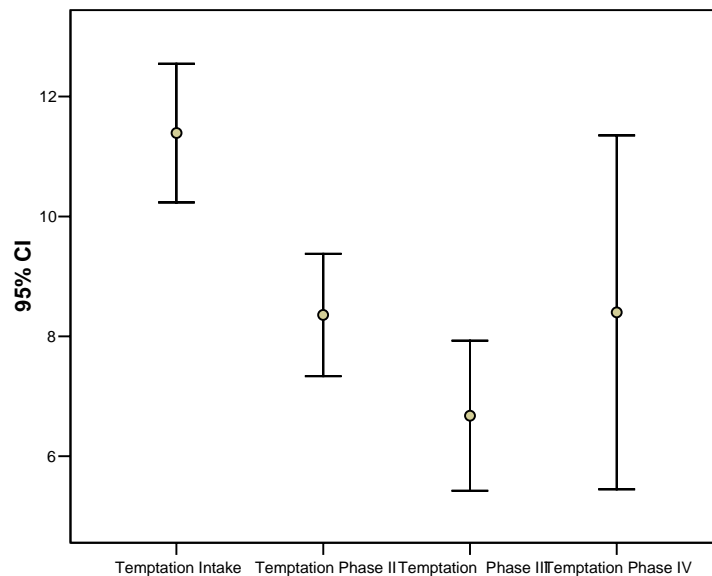
*A score of 4 or less (N<5) indicates a risk in family functioning

Self-Efficacy: Temptation and Confidence

Methamphetamine Abstinence Self-Efficacy Scale (MASE). The MASE is an adaptation of Alcohol Abstinence Self-Efficacy (AASE) to be specific for methamphetamine abuse. The MASE assesses Bandura's construct of self-efficacy and evaluations an individual's efficacy (i.e., confidence) to abstain from drinking in 20 situations that represent typical drinking cues. These situations form four subscales, comprising five items each, examining cues related to negative affect, social/positive, physical and other concerns, and withdrawal and urges. In addition, these same items can be assessed to evaluate an individual's temptation to drink, providing a measure of cue strength to relate to the efficacy evaluation. Both efficacy and temptation are rated on a 5-point Likert scales ranging from not at all to extremely. Individuals are asked to give a current estimate of temptation and efficacy.

The clients reported less temptation in the four main areas (Negative Affect, Social/Positive, Physical and Other Concerns, and Craving and Urges) assessed by the MASE, while in treatment. The largest declined occurred from Intake to Phase II.

Self-Efficacy: Temptation Summary Scores by Phase

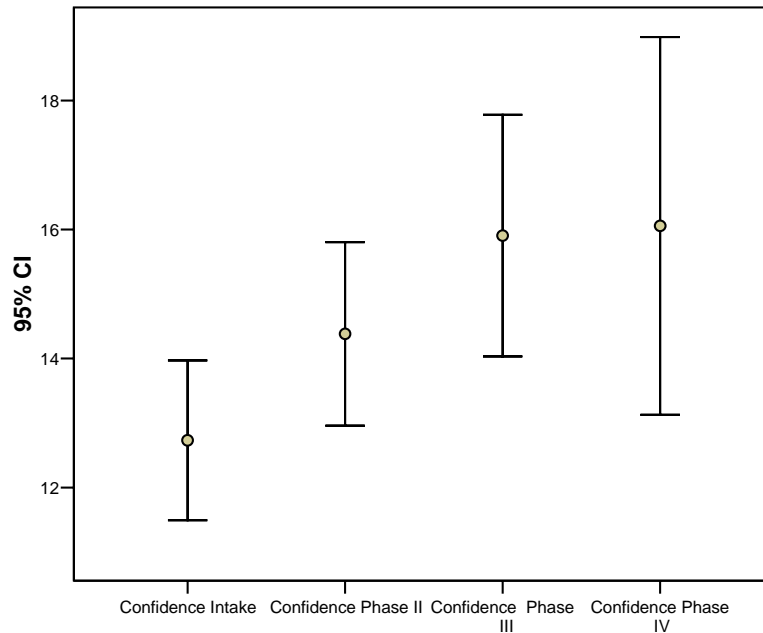


Self-Efficacy: Temptation by Phase

	N	Minimum	Maximum	Mean	Std. Deviation
Temptation Intake	48	4.00	17.80	11.3917	3.98315
Temptation Phase II	50	4.00	16.00	8.3560	3.59417
Temptation Phase III	32	4.00	14.60	6.6750	3.47628
Temptation Phase IV	16	4.00	20.00	8.4000	5.54256

Between intake and the end of Phase II, program participants indicated greater confidence in the following areas: Negative Affect, Social/Positive, Physical and Other Concerns, and Craving and Urges, assessed by the MASE. The trend continues for clients that remain in the program indicating program participants report greater confidence in their ability to not use methamphetamine.

Self-Efficacy: Confidence Summary Scores by Phase



Self-Efficacy: Confidence by Phase

	N	Minimum	Maximum	Mean	Std. Deviation
Confidence Intake	47	4.80	20.00	12.7319	4.22050
Confidence Phase II	44	4.00	20.00	14.3818	4.68105
Confidence Phase III	30	4.20	20.00	15.9067	5.01796
Confidence Phase IV	14	4.00	20.00	16.0571	5.07266

Overall, clients continue to increase their self-efficacy to abstain from using methamphetamine as documented by the MASE. Program participants report a reduction in temptation through the end of Phase III and an increase in Confidence through the end of Phase IV. During Phase IV, the majority of clients did report a decline in the Temptation scores. This could be related to the small number that have completed the program or the fact that many of these individuals are now completing the program and the added anxiety could be affecting the scores. It should be noted that while a decline was noted, it was a very slight decline as indicated in the graph above.

MASE Temptation and Confidence Score Improvement by Phase

	Intake to Phase II				Phase II to Phase III				Phase III to Phase IV			
	Temptation		Confidence		Temptation		Confidence		Temptation		Confidence	
	num	%	num	%	num	%			Num	%	num	%
Improved	33	76.7	27	67.5	22	73.3	21	80.8	6	40.0	9	75.0
Declined	10	23.3	13	32.5	8	26.7	5	19.2	9	60.0	3	25.0
Total*	43		40		30		26		15		12	

* Represents program participants with MASE scores available for analysis.